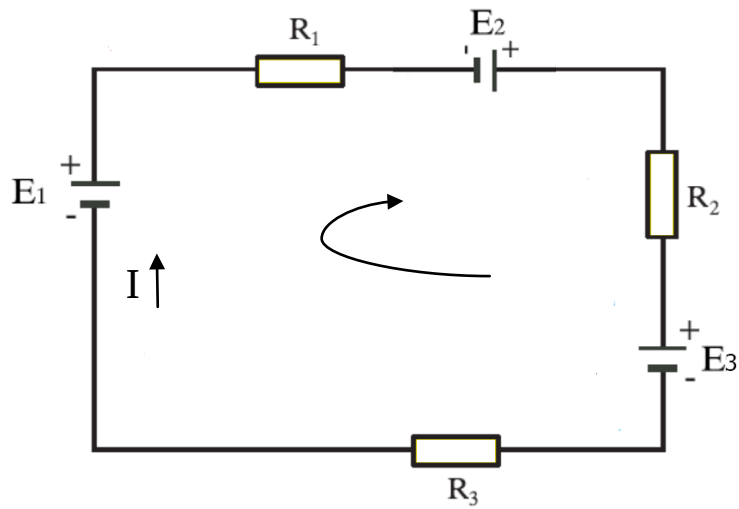


ΕΝΔΕΙΚΤΙΚΕΣ ΑΠΑΝΤΗΣΕΙΣ

ΘΕΜΑ 4^ο

4.1



$$4.2 \quad U_1 = I \cdot R_1 \Rightarrow U_1 = 2\text{A} \cdot 10\Omega \Rightarrow U_1 = 20\text{V}$$

$$U_2 = I \cdot R_2 \Rightarrow U_2 = 2\text{A} \cdot 20\Omega \Rightarrow U_2 = 40\text{V}$$

$$U_3 = I \cdot R_3 \Rightarrow U_3 = 2\text{A} \cdot 30\Omega \Rightarrow U_3 = 60\text{V}$$

$$4.3 \quad R_{\text{ολ}} = R_1 + R_2 + R_3 \Rightarrow R_{\text{ολ}} = 10\Omega + 20\Omega + 30\Omega \Rightarrow R_{\text{ολ}} = 60\Omega$$

4.4

$$E_1 + E_2 - E_3 = I \cdot R_1 + I \cdot R_2 + I \cdot R_3 \Rightarrow E_3 = E_1 + E_2 - I \cdot R_1 - I \cdot R_2 - I \cdot R_3 \Rightarrow$$

$$\Rightarrow E_3 = 80\text{V} + 100\text{V} - 2\text{A} \cdot 10\Omega - 2\text{A} \cdot 20\Omega - 2\text{A} \cdot 30\Omega \Rightarrow$$

$$\Rightarrow E_3 = 80\text{V} + 100\text{V} - 20\text{V} - 40\text{V} - 60\text{V} \Rightarrow E_3 = 60\text{V}$$